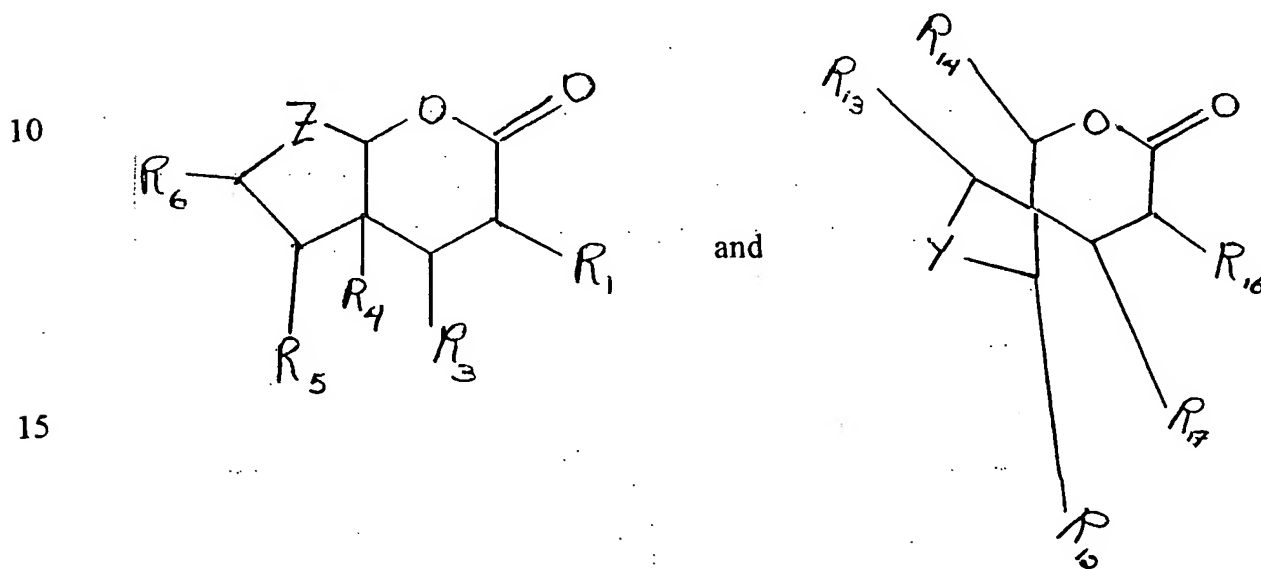
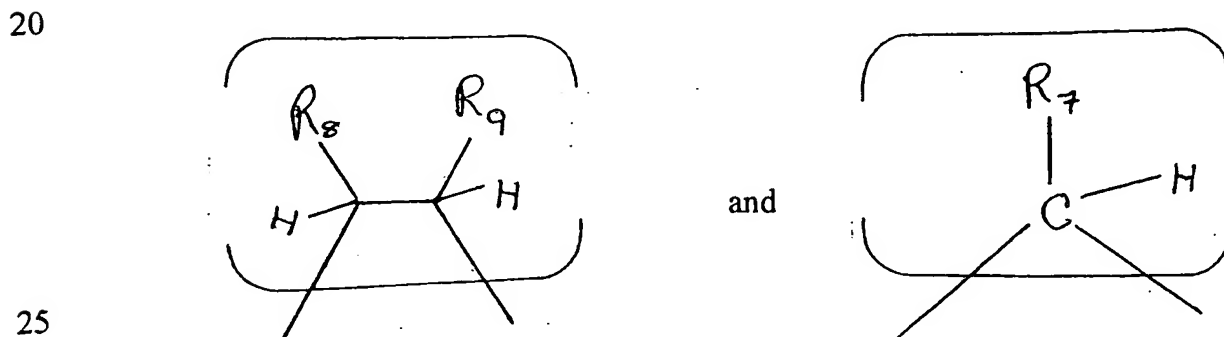


# WHAT IS CLAIMED IS:

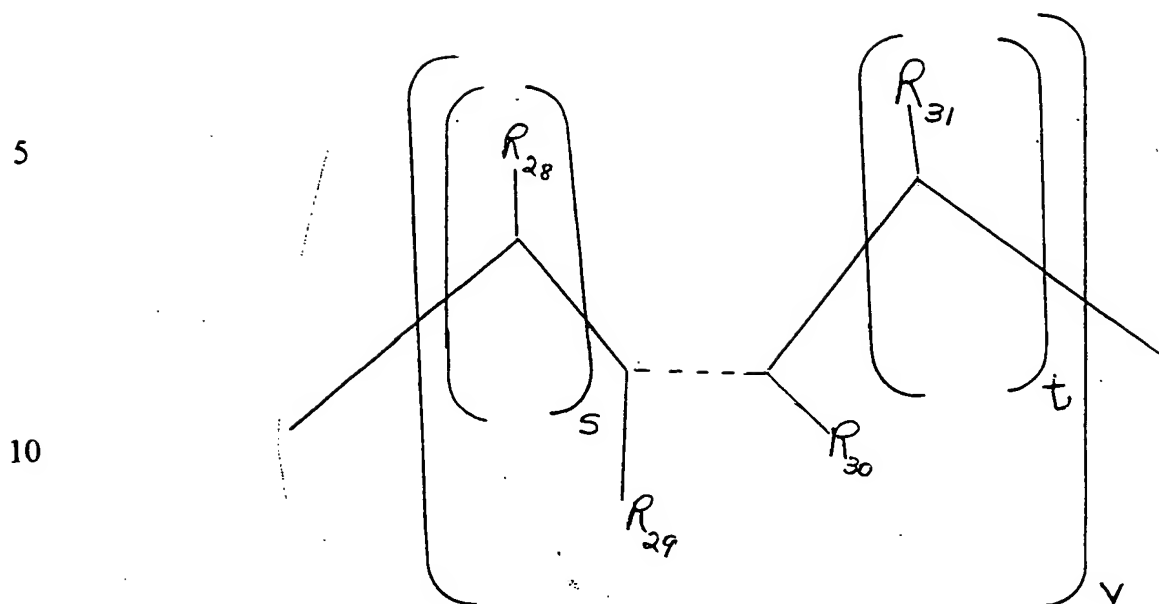
1. A process for augmenting, enhancing or imparting an aroma in or to a consumable material selected from the group consisting of perfume compositions, perfumed articles, colognes and perfume polymers, comprising the step of intimately admixing with a consumable material base an aroma augmenting, enhancing or imparting quantity and concentration of bicyclic lactone having a structure selected from the group consisting of:



wherein Z is a moiety selected from the group consisting of:

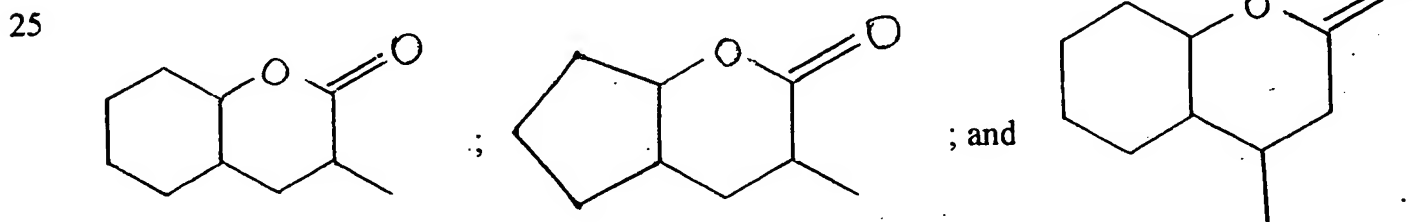


and wherein one of R<sub>1</sub> or R<sub>3</sub> is methyl and the other is hydrogen; wherein R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub> and R<sub>9</sub> are hydrogen or nonadjacent C<sub>1</sub>-C<sub>3</sub> alkyl; wherein Y is C<sub>2</sub>-C<sub>12</sub> substituted or unsubstituted alkylidenyl, alkenylidenyl or alkadienylidenyl having the structure:

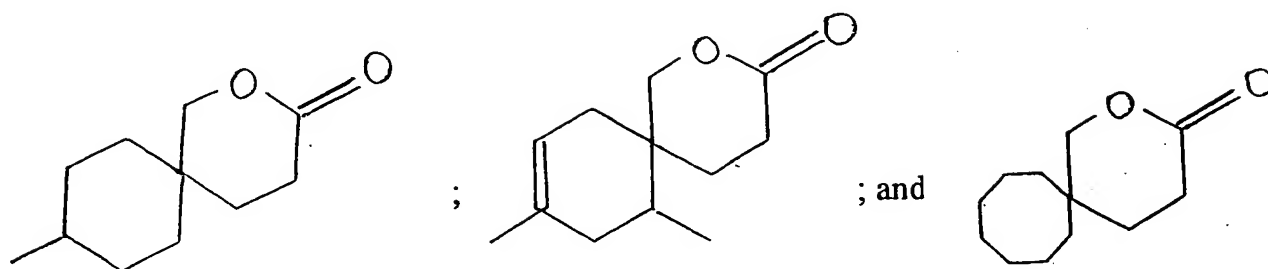


- 15 and completes a  $C_5$ - $C_{15}$  cycloalkyl, cycloalkadienyl or cycloalkenyl ring moiety; wherein  $R_{12}$ ,  $R_{13}$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{17}$ ,  $R_{28}$ ,  $R_{29}$ ,  $R_{30}$  and  $R_{31}$  each represents hydrogen or  $C_1$ - $C_3$  nonadjacent alkyl; wherein the dashed line represents a carbon carbon single bond or a carbon carbon double bond; wherein  $s$  is an integer of from 0 up to 10;  $t$  is an integer of from 0 up to 10; wherein the sum of  $s$  and  $t$  is an integer of from 0 up to 10 defined
- 20 according to the inequalities:  $0 \leq s + t \leq 10$ ;  $0 \leq s \leq 10$ ; and  $0 \leq t \leq 10$ ; and wherein  $v$  1 or 2.

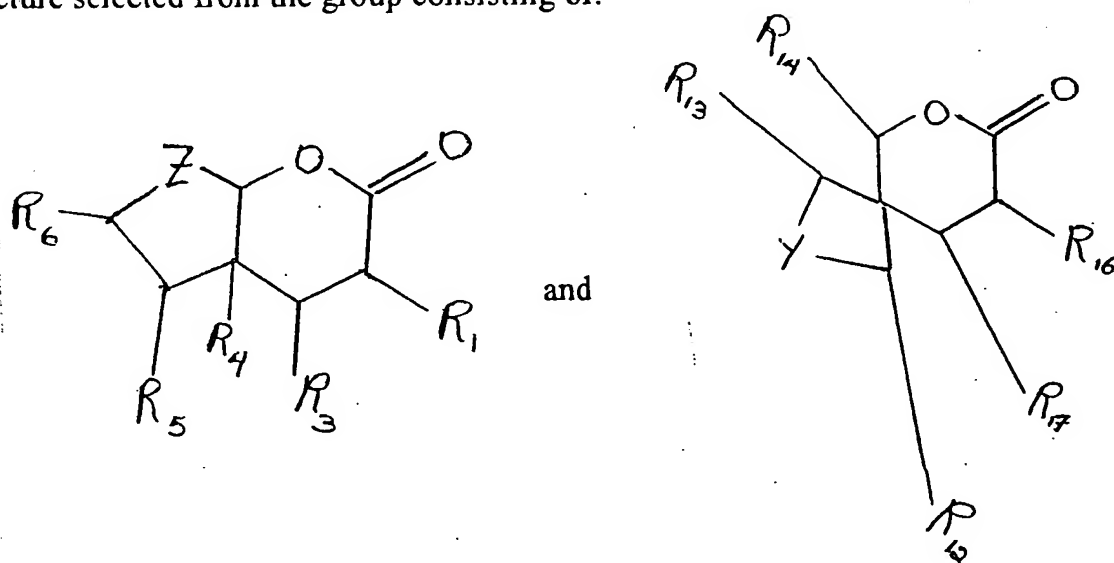
2. The process of Claim 1 wherein the bicyclic lactone has a structure selected from the group consisting of:



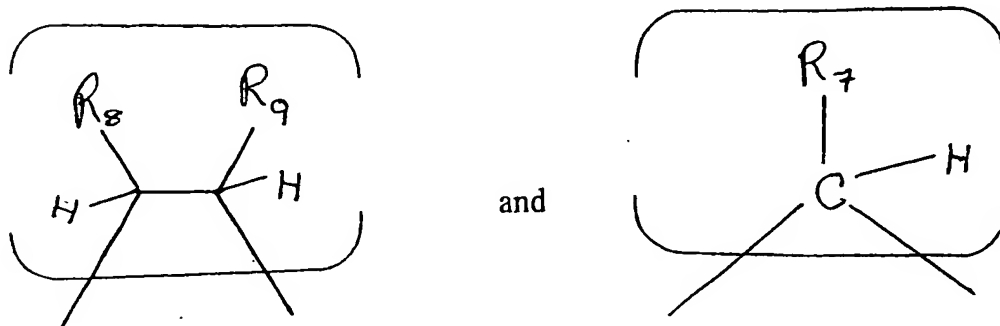
3. The process of Claim 1 wherein the bicyclic lactone has a structure selected from the group consisting of:



4. A perfumed article comprising a perfumed article base and an aroma augmenting, enhancing or imparting quantity and concentration of a bicyclic lactone having a structure selected from the group consisting of:



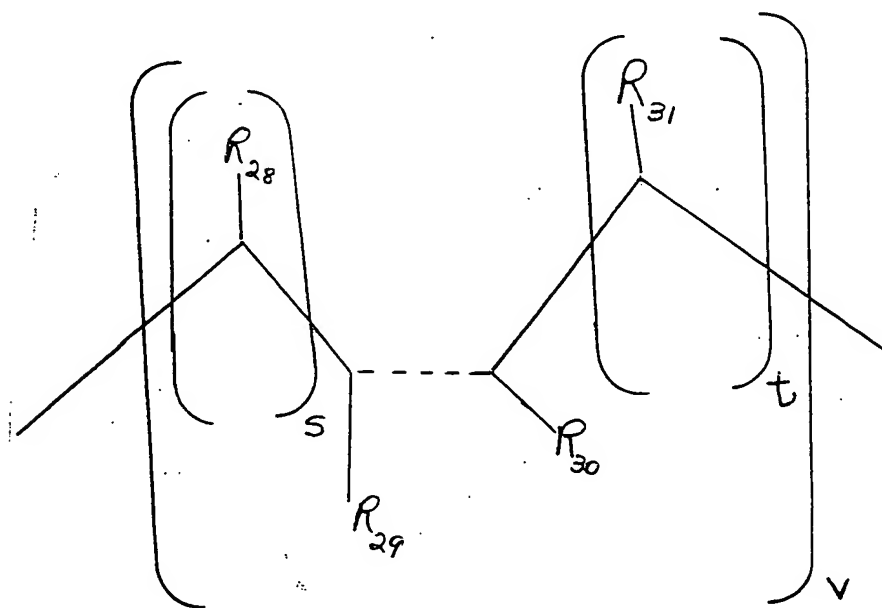
wherein Z is a moiety selected from the group consisting of:



and wherein one of  $R_1$  or  $R_3$  is methyl and the other is hydrogen; wherein  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$  and  $R_9$  are hydrogen or nonadjacent  $C_1$ - $C_3$  alkyl; wherein  $Y$  is  $C_2$ - $C_{12}$  substituted or unsubstituted alkylidenyl, alkenylidenyl or alkadienylidenyl having the structure:

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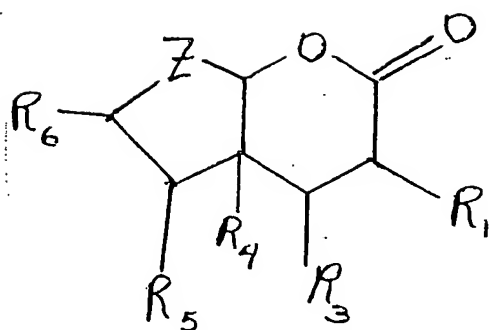
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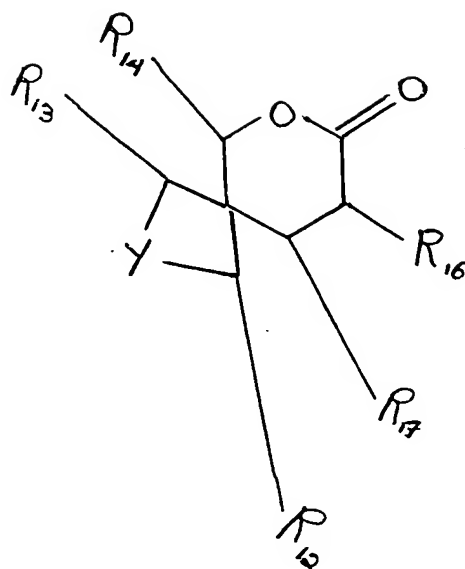
and completes a  $C_5$ - $C_{15}$  cycloalkyl, cycloalkadienyl or cycloalkenyl ring moiety; wherein  $R_{12}$ ,  $R_{13}$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{17}$ ,  $R_{28}$ ,  $R_{29}$ ,  $R_{30}$  and  $R_{31}$  each represents hydrogen or  $C_1$ - $C_3$  nonadjacent alkyl; wherein the dashed line represents a carbon carbon single bond or a carbon carbon double bond; wherein  $s$  is an integer of from 0 up to 10;  $t$  is an integer of from 0 up to 10; wherein the sum of  $s$  and  $t$  is an integer of from 0 up to 10 defined according to the inequalities:  $0 \leq s + t \leq 10$ ;  $0 \leq s \leq 10$ ; and  $0 \leq t \leq 10$ ; and wherein  $v$  1 or 2.

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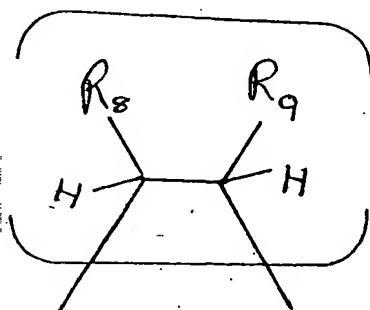
5. A perfumed polymer comprising a microporous polymer and contained in the interstices thereof an aroma augmenting, enhancing or imparting quantity and concentration of a bicyclic lactone having a structure selected from the group consisting of:



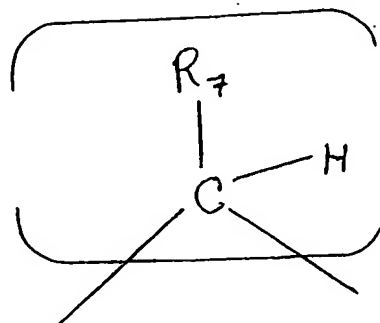
and



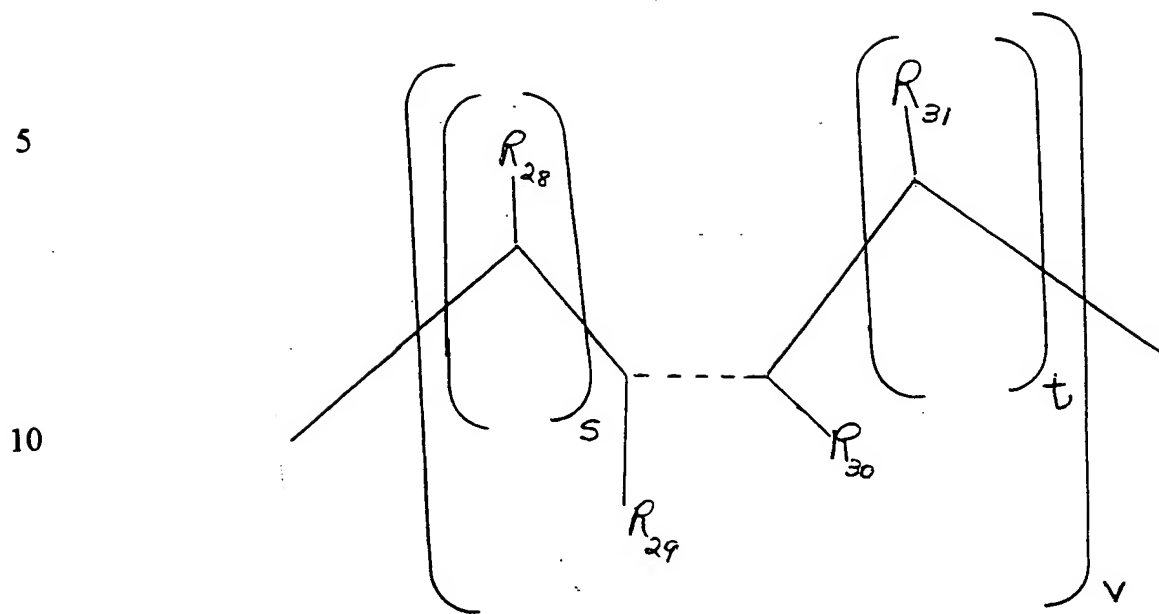
wherein **Z** is a moiety selected from the group consisting of:



and



and wherein one of **R**<sub>1</sub> or **R**<sub>3</sub> is methyl and the other is hydrogen; wherein **R**<sub>4</sub>, **R**<sub>5</sub>, **R**<sub>6</sub>, **R**<sub>7</sub>, **R**<sub>8</sub> and **R**<sub>9</sub> are hydrogen or nonadjacent C<sub>1</sub>-C<sub>3</sub> alkyl; wherein **Y** is C<sub>2</sub>-C<sub>12</sub> substituted or unsubstituted alkylidenyl, alkenylidenyl or alkadienylidenyl having the structure:

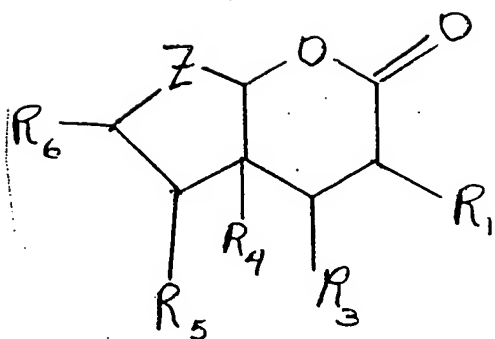


and completes a  $C_5$ - $C_{15}$  cycloalkyl, cycloalkadienyl or cycloalkenyl ring moiety; wherein  $R_{12}$ ,  $R_{13}$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{17}$ ,  $R_{28}$ ,  $R_{29}$ ,  $R_{30}$  and  $R_{31}$  each represents hydrogen or  $C_1$ - $C_3$  nonadjacent alkyl; wherein the dashed line represents a carbon carbon single bond or a carbon carbon double bond; wherein  $s$  is an integer of from 0 up to 10;  $t$  is an integer of from 0 up to 10; wherein the sum of  $s$  and  $t$  is an integer of from 0 up to 10 defined according to the inequalities:  $0 \leq s + t \leq 10$ ;  $0 \leq s \leq 10$ ; and  $0 \leq t \leq 10$ ; and wherein  $v$  1 or 2.

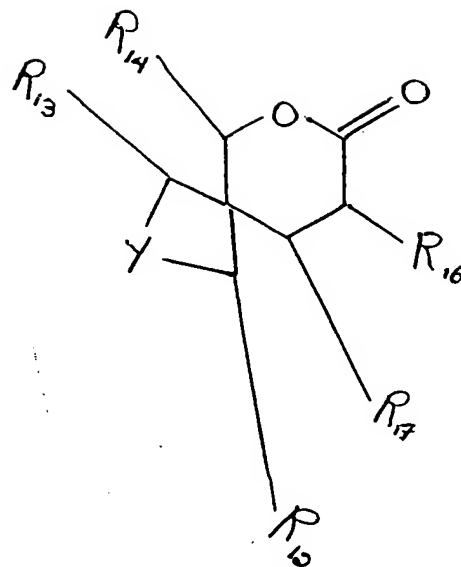
6. A perfume composition comprising a perfume base and intimately admixed therewith an aroma augmenting, enhancing or imparting quantity of a bicyclic lactone having a structure selected from the group consisting of:

5

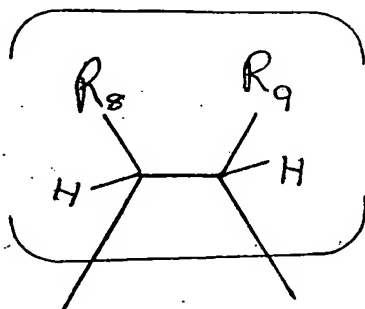
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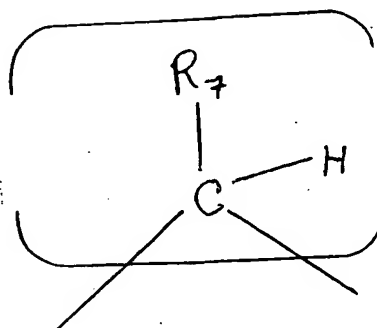
and



wherein Z is a moiety selected from the group consisting of:

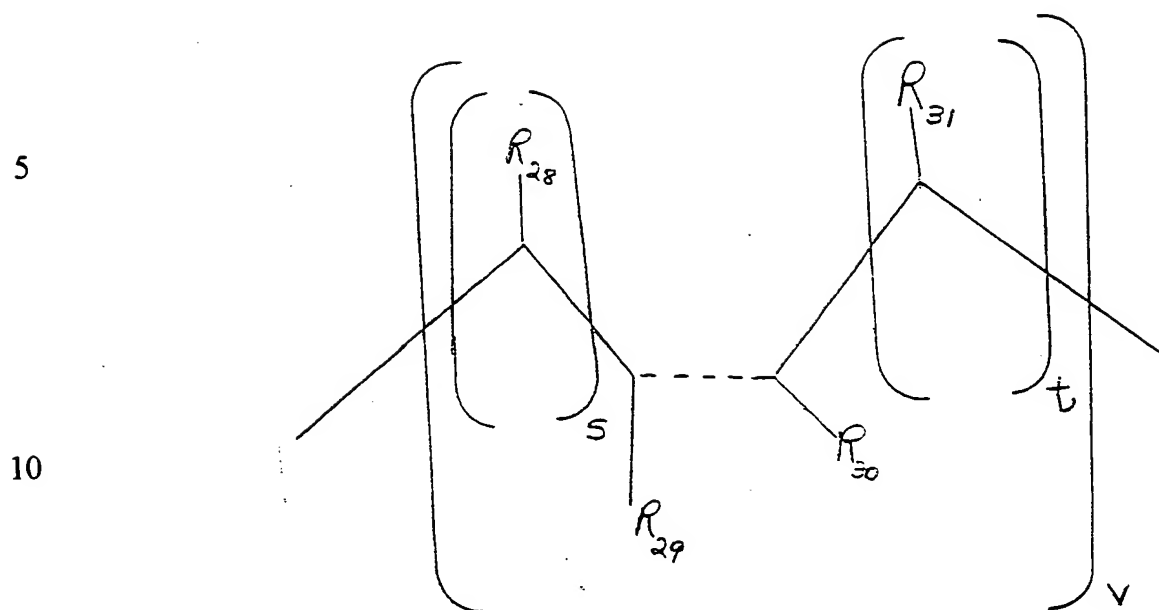


and



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and wherein one of  $R_1$  or  $R_3$  is methyl and the other is hydrogen; wherein  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$  and  $R_9$  are hydrogen or nonadjacent  $C_1$ - $C_3$  alkyl; wherein Y is  $C_2$ - $C_{12}$  substituted or unsubstituted alkylidenyl, alkenylidenyl or alkadienylidenyl having the structure:



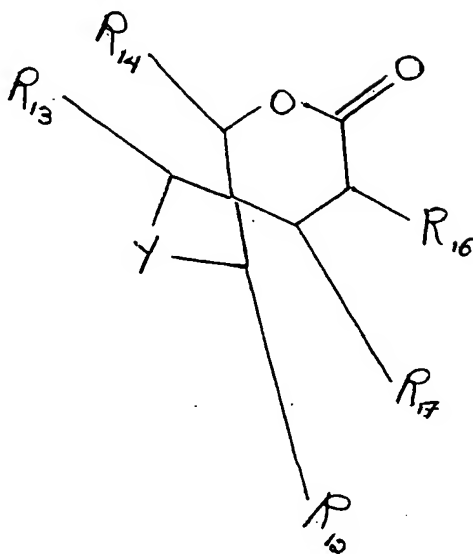
15 and completes a  $C_5$ - $C_{15}$  cycloalkyl, cycloalkadienyl or cycloalkenyl ring moiety; wherein  $R_{12}$ ,  $R_{13}$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{17}$ ,  $R_{28}$ ,  $R_{29}$ ,  $R_{30}$  and  $R_{31}$  each represents hydrogen or  $C_1$ - $C_3$  nonadjacent alkyl; wherein the dashed line represents a carbon carbon single bond or a carbon carbon double bond; wherein  $s$  is an integer of from 0 up to 10;  $t$  is an integer of from 0 up to 10; wherein the sum of  $s$  and  $t$  is an integer of from 0 up to 10 defined  
 20 according to the inequalities:  $0 \leq s + t \leq 10$ ;  $0 \leq s \leq 10$ ; and  $0 \leq t \leq 10$ ; and wherein  $v$  1 or 2.

7. The process of Claim 1 wherein the consumable material is a detergent composition or a fabric softener composition.

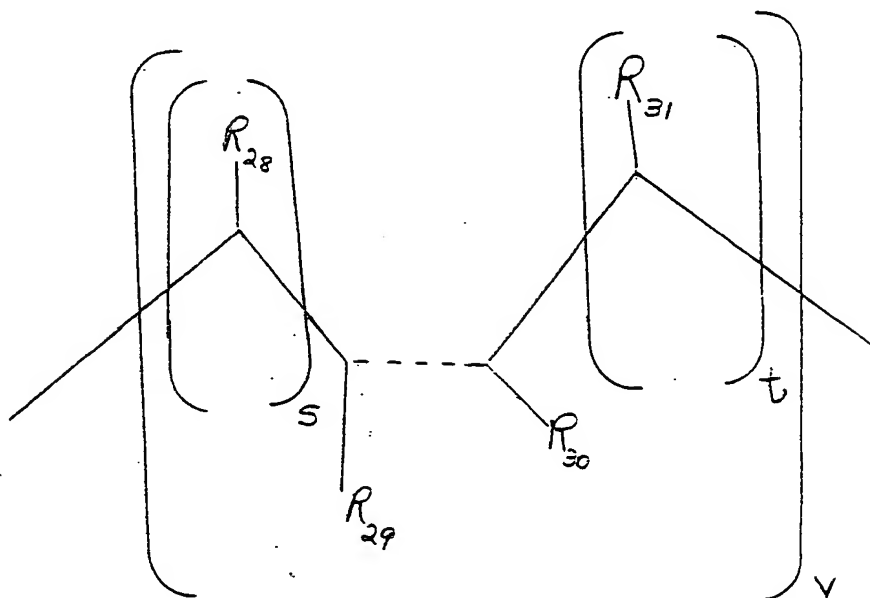
25 8. The process of Claim 2 wherein the consumable material is a detergent composition or a fabric softener composition.



9. A bicyclic lactone having the structure:



wherein Y is C<sub>2</sub>-C<sub>12</sub> substituted or unsubstituted alkylidenyl, alkenylidenyl or alkadienylidenyl having the structure:

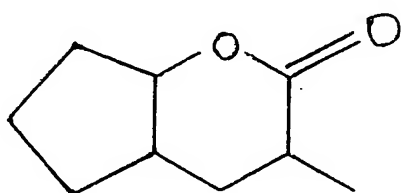


and completes a C<sub>5</sub>-C<sub>15</sub> cycloalkyl, cycloalkadienyl or cycloalkenyl ring moiety; wherein

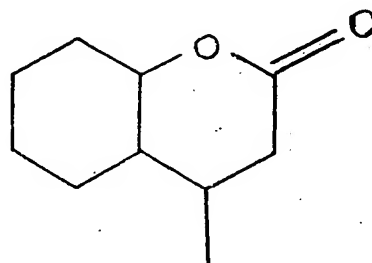
$R_{12}$ ,  $R_{13}$ ,  $R_{14}$ ,  $R_{16}$ ,  $R_{17}$ ,  $R_{28}$ ,  $R_{29}$ ,  $R_{30}$  and  $R_{31}$  each represents hydrogen or  $C_1$ - $C_3$  nonadjacent alkyl; wherein the dashed line represents a carbon carbon single bond or a carbon carbon double bond; wherein  $s$  is an integer of from 0 up to 10;  $t$  is an integer of from 0 up to 10; wherein the sum of  $s$  and  $t$  is an integer of from 0 up to 10 defined according to the inequalities:  $0 \leq s + t \leq 10$ ;  $0 \leq s \leq 10$ ; and  $0 \leq t \leq 10$ ; and wherein  $v$  1 or 2.

10. A bicyclic lactone having a structure selected from the group consisting of:

10



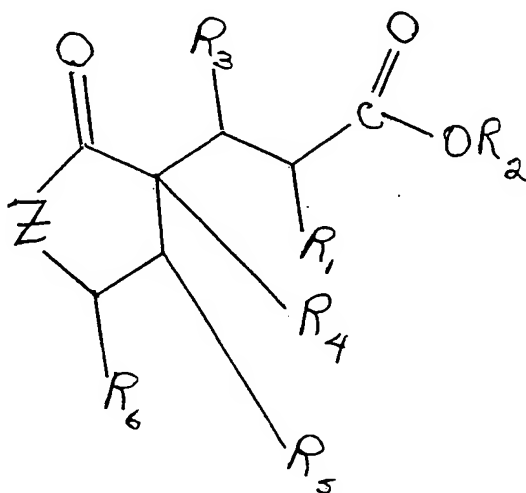
and



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11. A ketoester having the structure:

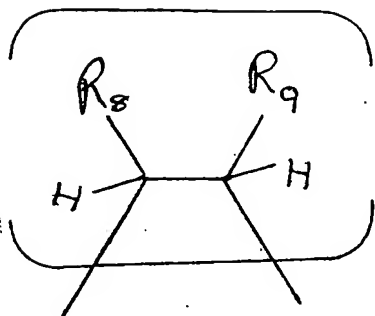
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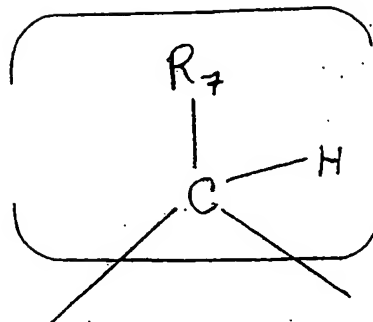
25

wherein  $Z$  is a moiety selected from the group consisting of:

5



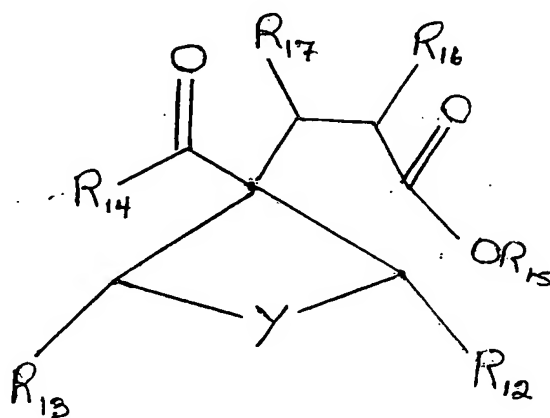
and



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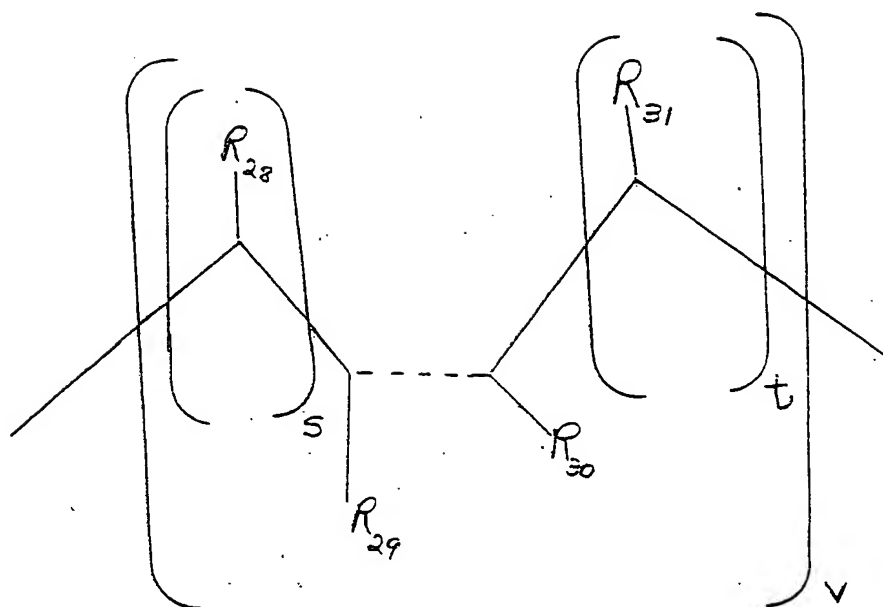
wherein  $R_2$  is  $C_1$ - $C_4$  lower alkyl; wherein one of  $R_1$  or  $R_3$  is methyl and the other is hydrogen; wherein  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$  and  $R_9$  are hydrogen or nonadjacent  $C_1$ - $C_3$  alkyl.

12. An oxo-ester having the structure:



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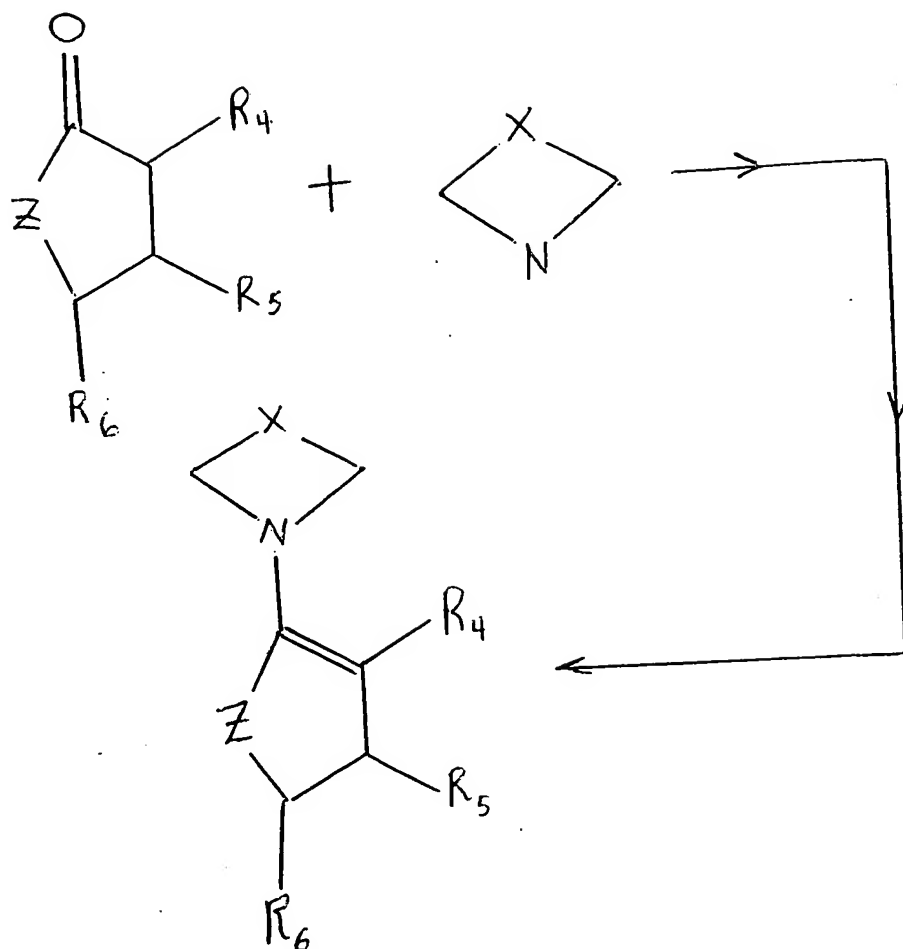
wherein  $R_{15}$  is  $C_1$ - $C_4$  lower alkyl; wherein  $Y$  is  $C_2$ - $C_{12}$  substituted or unsubstituted alkylidenyl, alkenylidenyl or alkadienylidenyl having the structure:



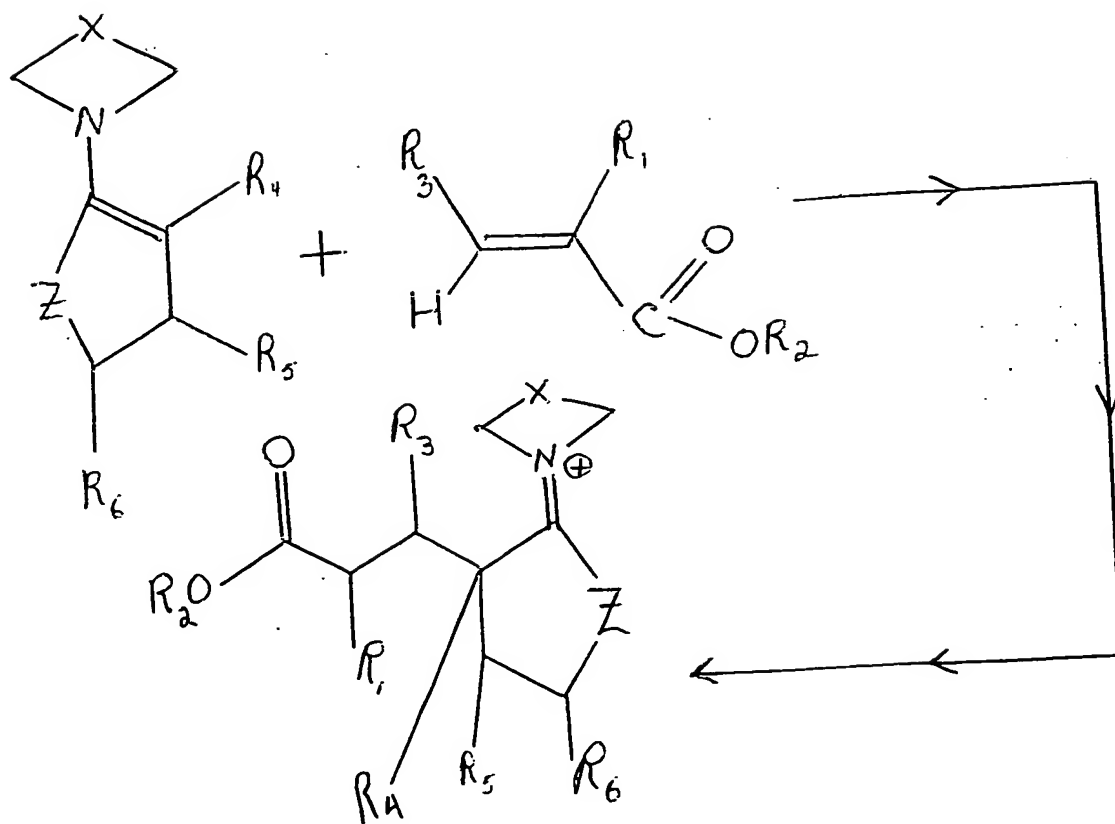
and completes a C<sub>5</sub>-C<sub>15</sub> cycloalkyl, cycloalkadienyl or cycloalkenyl ring moiety; wherein R<sub>12</sub>, R<sub>13</sub>, R<sub>14</sub>, R<sub>16</sub>, R<sub>17</sub>, R<sub>28</sub>, R<sub>29</sub>, R<sub>30</sub> and R<sub>31</sub> each represents hydrogen or C<sub>1</sub>-C<sub>3</sub> nonadjacent alkyl; wherein the dashed line represents a carbon carbon single bond or a carbon carbon double bond; wherein s is an integer of from 0 up to 10; t is an integer of from 0 up to 10; wherein the sum of s and t is an integer of from 0 up to 10 defined according to the inequalities:  $0 \leq s + t \leq 10$ ;  $0 \leq s \leq 10$ ; and  $0 \leq t \leq 10$ ; wherein v 1 or 2; and wherein R<sub>15</sub> represents C<sub>1</sub>-C<sub>4</sub> lower alkyl.

13. A process for the preparation of a bicyclic lactone comprising the steps of carrying out the reaction sequence in order:

(i)

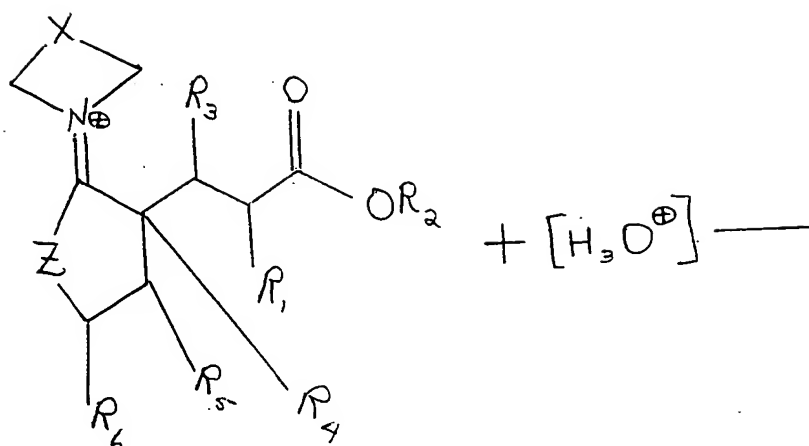


(ii)

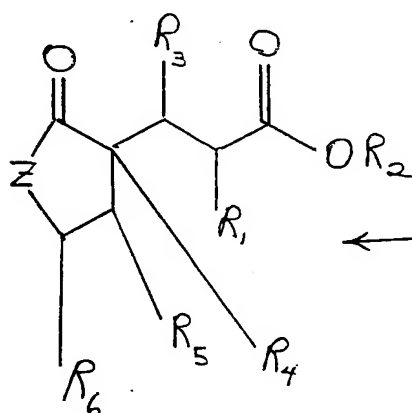


(iii)

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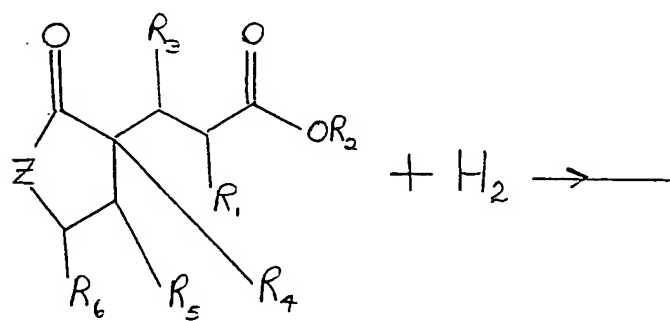
10



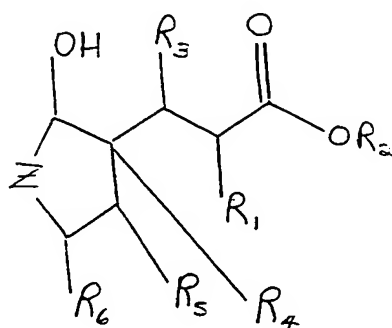
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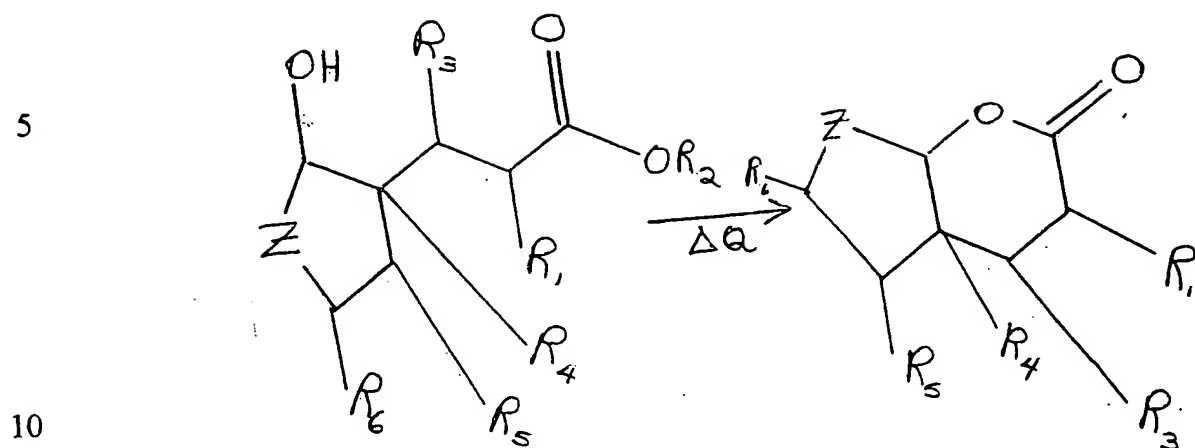
(iv)



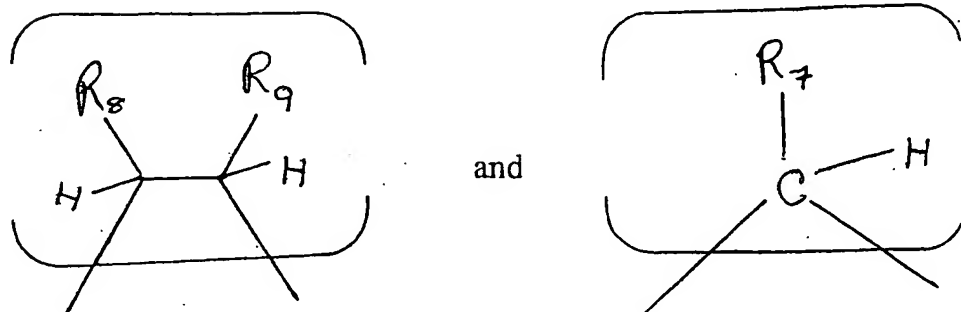
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; and



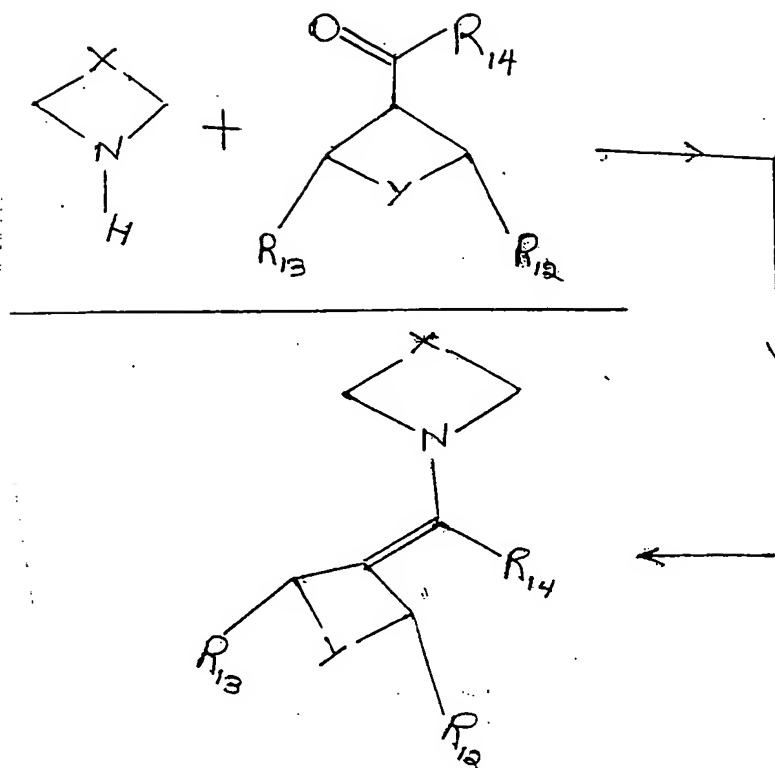
and isolating the resulting bicyclic lactone wherein Z is a moiety selected from the group consisting of:



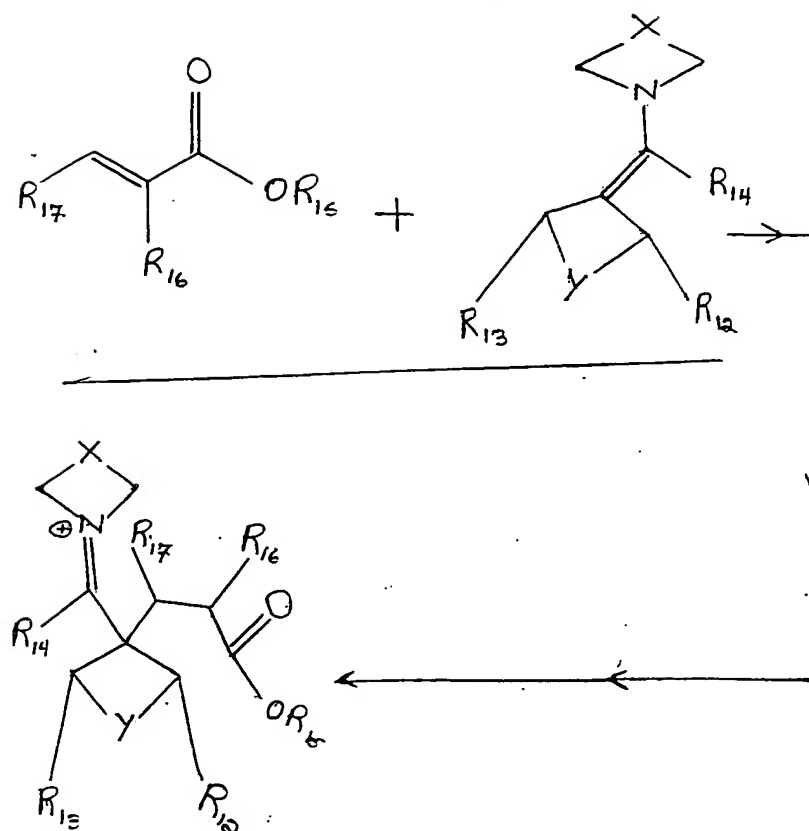
and wherein one of  $R_1$  or  $R_3$  is methyl and the other is hydrogen; wherein  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$  and  $R_9$  are hydrogen or nonadjacent  $C_1$ - $C_3$  alkyl; and wherein  $R_2$  represents  $C_1$ - $C_4$  alkyl.

- 25
14. A process for the preparation of a bicyclic lactone comprising the steps of carrying out the reaction sequence in order:

(i)

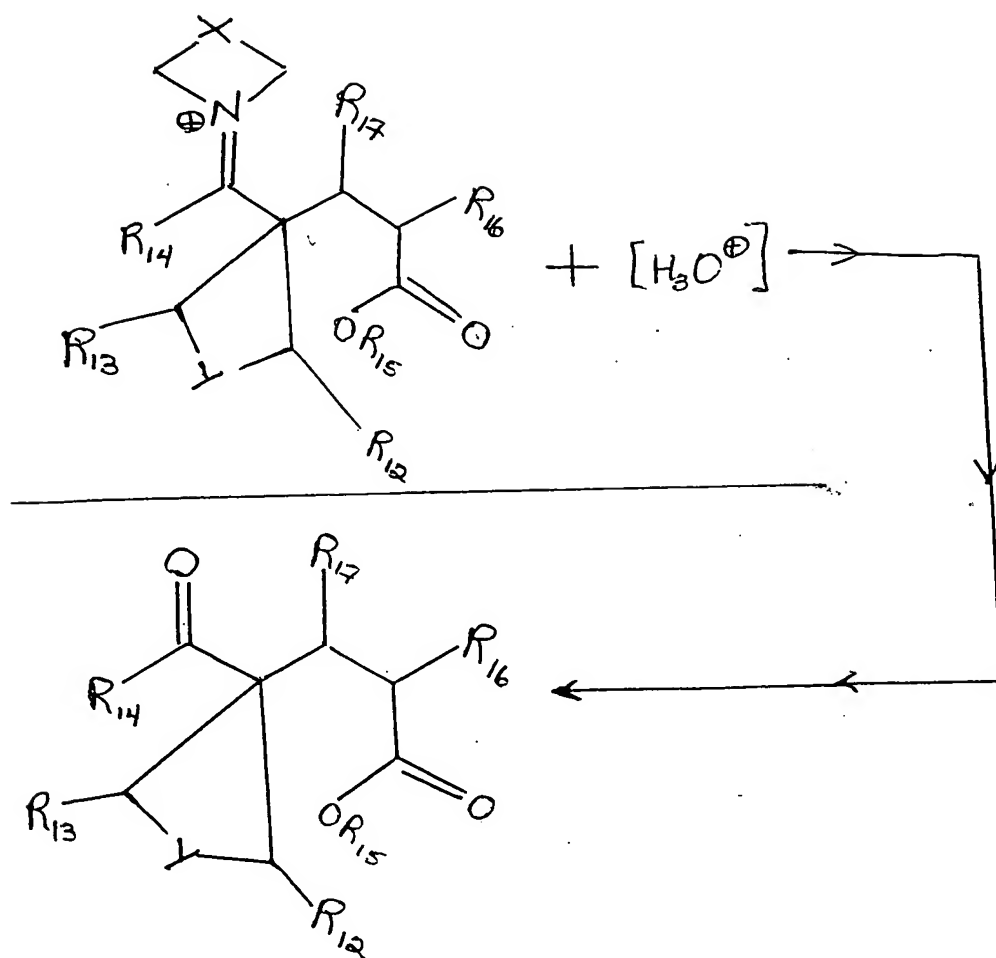


(ii)



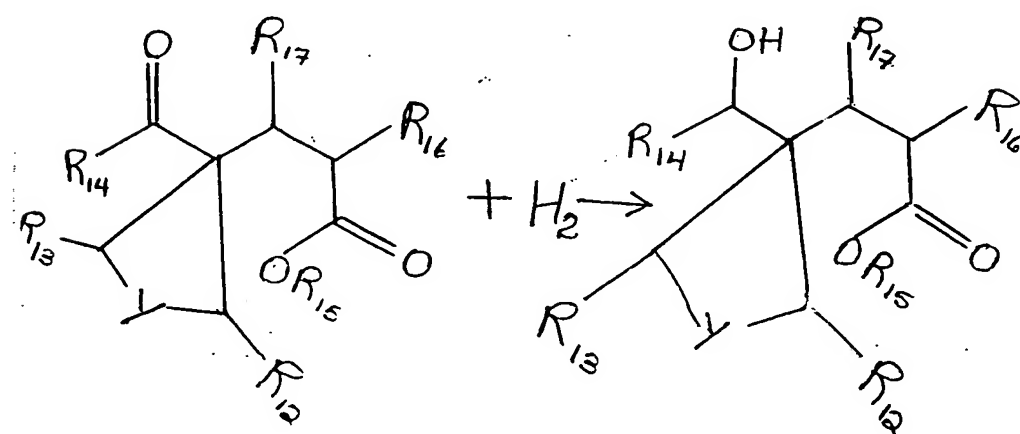


(iii)



;

(iv)

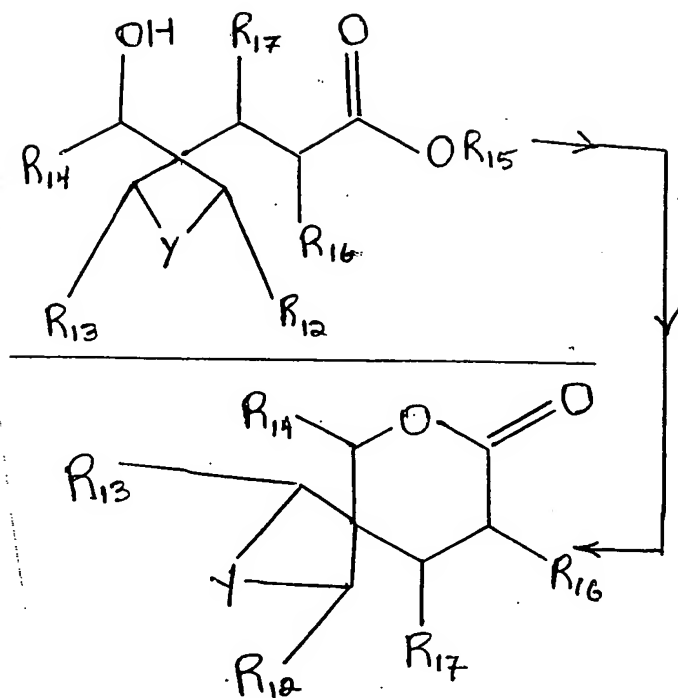


; and

(v)

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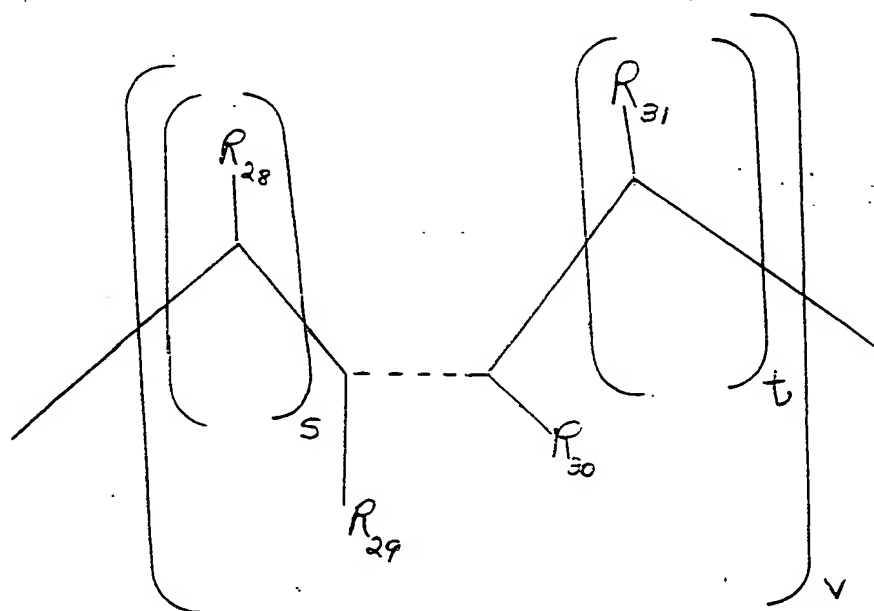
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5 and isolating the resulting bicyclic lactone wherein wherein  $R_{15}$  is  $C_1$ - $C_4$  lower alkyl; wherein  $Y$  is  $C_2$ - $C_{12}$  substituted or unsubstituted alkylidenyl, alkenylidenyl or alkadienylidenyl having the structure:

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and completes a C<sub>5</sub>-C<sub>15</sub> cycloalkyl, cycloalkadienyl or cycloalkenyl ring moiety; wherein  
R<sub>12</sub>, R<sub>13</sub>, R<sub>14</sub>, R<sub>16</sub>, R<sub>17</sub>, R<sub>28</sub>, R<sub>29</sub>, R<sub>30</sub> and R<sub>31</sub> each represents hydrogen or C<sub>1</sub>-C<sub>3</sub>  
nonadjacent alkyl; wherein the dashed line represents a carbon carbon single bond or a  
carbon carbon double bond; wherein s is an integer of from 0 up to 10; t is an integer of  
5 from 0 up to 10; wherein the sum of s and t is an integer of from 0 up to 10 defined  
according to the inequalities:  $0 \leq s + t \leq 10$ ;  $0 \leq s \leq 10$ ; and  $0 \leq t \leq 10$ ;  
wherein v 1 or 2; and wherein R<sub>15</sub> represents C<sub>1</sub>-C<sub>4</sub> lower alkyl.